

TAGA data review Tuesday, 09/12/2017

The Environmental Response Team's (ERT's) mobile laboratory, using the Trace Atmospheric Gas Analyzer (TAGA) tandem mass spectrometer system, monitored the neighborhoods adjacent to the Valero Refinery, the Pasadena Refinery and the Kinder Morgan Terminal in the Harrisburg/Manchester area of Houston, and along the East Loop Road, and adjacent to the Pasadena Freeway service road. The air monitoring conducted on Tuesday, 09/12/2017 indicated that the TAGA-specific analytes were below the Texas Commission on Environmental Quality (TCEQ) comparison levels (short-term Air Monitoring Comparison Values (AMCVs)). Therefore, it appears that there is no significant air concern based upon the TCEQ comparison levels.

Substance	CAS #	TAGA detection limit (ppbv)	Short-term AMCV Health (ppbv)	Short-term AMCV Health (µg/m3)
1,1,1-trichloroethane	71-55-6	1	1700	9500
1,1-dichloroethane	75-34-3	1	1000	4000
1,1-dichloroethylene	75-35-4	1	180	710
benzene	71-43-2	1	180	580
ethylbenzene	100-41-4	1	20000	86000
m/p-xylene	179601-23-1	1	1700	7400
methyl tert-butyl ether	1634-04-4	1	500	1800
o-xylene	95-47-6	1	1700	7400
tetrachloroethylene	127-18-4	1	1000	6800
toluene	108-88-3	1	4000	15000
trichloroethylene	79-01-6	1	100	540

#### **What's an AMCV?**

AMCV is a collective term used to describe chemical-specific air concentrations used to evaluate air monitoring data that are set to protect human health and welfare. Short-term AMCVs are based on data concerning acute health effects. AMCVs may contain health-based Reference Values (ReVs) and health- and welfare-based ESL values.

**AMCVs** are screening levels used in TCEQ's evaluation of ambient air monitoring data to assess the potential for measured concentrations of specific chemicals to cause health or welfare effects. Health-based AMCVs are levels at which exposure is unlikely to result in adverse health effects.